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## VALVULAR HEART DISEASE

### THE PREVALENCE AND SIGNIFICANCE OF CORONARY DISEASE AMONG HIGH-RISK PATIENTS WITH SEVERE SYMPTOMATIC AORTIC STENOSIS

ACC Poster Contributions

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Abstract Category: Valvular Disease

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**Background:** Coronary artery disease (CAD) is often present with severe aortic stenosis (AS). We aimed to identify the prevalence and clinical significance of CAD and its relation to calcification severity or degree of aortic valve stenosis.

**Methods:** 364 high-risk patients (pts) with severe AS who were referred to participate in a trial of trans-catheter aortic valve implantation were included. Pts were studied based on their CAD -- normal coronaries, non obstructive CAD (< 50% stenosis), and significant CAD ( $\geq 50\%$  stenosis).

**Results:** Angiographic findings detected normal coronaries in 50 (13.7%), non-significant CAD in 90 (24.7%), and significant CAD in 224 (61.5%). Significant CAD was common in pts with higher STS/EuroSCORE and cardiac risk factors and with lower ejection fraction. (Table) There was no correlation between significant CAD and aortic valve area ( $r=0.1$ ,  $p=0.06$ ). The mortality rate was 121 (33.2%) during median follow up 343.5 [157-619.7] days. There was no difference in mortality rate among the 3 groups. There was significant correlation between the presence of significant CAD and aortic valve calcification ( $r=0.3$ ,  $p<0.001$ ).

**Conclusion:** The prevalence of significant CAD among pts with severe AS is high (~60%) and correlates with the degree of calcification but not with the degree of stenosis. The presence of significant CAD does have an impact on clinical outcome, which may allow for treating the AS first and deferment of coronary intervention in this high-risk group.

	Normal CAD N=50	Non-significant CAD N=90	Significant CAD N=224	P value
Age (years)	79.2 $\pm$ 10.4	81.7 $\pm$ 9.1	81.7 $\pm$ 7.5	0.1
Female (%)	38 (76)	60 (66.6)	105 (46.8)	<0.001
Hyperlipidemia (%)	26 (53.1)	57 (63.3)	182 (82)	<0.001
Smoking (%)	12 (24.5)	12 (13.3)	66 (29.4)	0.01
PVD (%)	11 (22.4)	22 (24.7)	82 (36.6)	0.03
STS score (%)	10.3 $\pm$ 5.5	10.8 $\pm$ 5.4	12.3 $\pm$ 6.8	0.05
Logistic EuroSCORE (%)	27.2 $\pm$ 18.6	31.6 $\pm$ 18.3	43.1 $\pm$ 23.4	<0.001
Ejection fraction (%)	55.2 $\pm$ 15.9	54.5 $\pm$ 15.6	46.2 $\pm$ 17.4	<0.001
Mortality (%)	16 (32)	29 (32.2)	76 (33.9)	0.9